

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTIONS OF NEW SPECIES OF *SYNAPTOMYS*
AND *PHENACOMYS* FROM MACKENZIE,
CANADA.

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In studying a collection of mammals from the region of Athabasca and Great Slave lakes, I find the following forms of *Synaptomys* and *Phenacomys* which appear to be undescribed. Neither of these genera has been previously recorded from this region.

***Synaptomys* (*Mictomys*) *bullatus* sp. nov.**

Type from Trout Rock, near Fort Rae, Great Slave Lake, Mackenzie, Canada. Skin and skull No. 110,632, ♂ ad., U. S. National Museum, Biological Survey Collection. Collected August 17, 1901, by Edward A. Preble. Original No., 4511.

General characters.—Similar to *Synaptomys* (*Mictomys*) *innuitus*, but differing in cranial characters; closely resembling *S. dalli* cranially, but differing in color; hind foot small.

Color.—Fur at base dark plumbeous, tipped with black and reddish-brown, the black usually predominating on the back; sides lighter than back; belly ashy-plumbeous, rather abruptly separated from the color of sides; feet dusky brown; tail bicolor, dusky above, ashy beneath.

Skull.—Compared with skulls of *Synaptomys* (*Mictomys*) *innuitus* from Labrador, skulls of *bullatus* differ as follows: skulls less flat, the zygomatic

arch descending farther below level of top of skull; bullæ more inflated.

Measurements.—Of type: total length, 130; tail vertebræ, 24; hind foot, 18. The skull of the type measures: occipito-nasal length (tip of nasals to foramen magnum), 26; zygomatic breadth, 16; interorbital constriction, 3; length of upper molar series (crowns), 7.

General remarks.—Cranially *Synaptomys bullata* resembles closely *S. dalli* of Alaska, but in color it shows much less reddish-brown than either *wrangeli* or *dalli*. The hind foot of *bullata* is smaller than that of *wrangeli*, *dalli*, or *innuitus*.

***Phenacomys mackenzii* sp. nov.**

Type from Fort Smith, Slave River (near the Athabasca-Mackenzie boundary line), Canada. Skin and skull No. 110,625, ♂ ad., U. S. National Museum, Biological Survey Collection. Collected June 29, 1901, by Edward A. Preble and Alfred E. Preble. Original No. 4271.

General characters.—Similar to *Phenacomys celatus* and *P. c. crassus*, but differing in cranial characters.

Color.—Fur everywhere plumbeous at base, on back tipped with yellowish-brown, black, and gray in varying proportions; beneath grayish-white, passing gradually on sides into color of back; tail bicolor, narrowly brownish above, grayish-white beneath.

Cranial characters.—Compared with skulls of *P. celatus*, those of *mackenzii* have the bullæ more roundly inflated, palate shorter, rostrum more slender, postorbital process of squamosal more slender, and interorbital constriction narrower. Interorbital beads prominent, even in youth, converging early in life and nearly uniting in old age.

Measurements.—The type measures: total length, 142; tail vertebræ, 34; hind foot, 17. Ten adult specimens of both sexes from type locality average: total length, 140.7; tail vertebræ, 32.7; hind foot, 17.

General remarks.—In color the type series resembles quite closely a portion of the type series of *Phenacomys c. crassus*, kindly lent me for comparison by Mr. Outram Bangs. I have not examined specimens of *Phenacomys constablei*, described by Allen from Telegraph Creek, British Columbia,* which seems to belong to this group, but its measurements show that it has a larger hind foot than *P. mackenzii*.

*Bull. Am. Mus. Nat. Hist., Vol. XII, p. 4, 1899.